CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

ORDER NO. 00-093 NPDES NO. CA7000012

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND

WASTE DISCHARGE REQUIREMENTS
FOR
UNITED STATES NAVY, OWNER
NAVAL AIR FACILITY, EL CENTRO, OPERATOR
TREATED GROUNDWATER DISCHARGE
EI Centro – Imperial County

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

- 1. The United States Navy, Naval Air Facility, El Centro, (NAF El Centro) (hereinafter referred to as the discharger), 1605 3rd Street, Naval Air Facility, El Centro, CA 92243-5001 submitted an application dated June 15, 2000 to discharge treated groundwater under the National Pollutant Discharge Elimination System (NPDES).
- 2. The proposed point of discharge is into a dry stormwater ditch located in Section 24, T15S, R12E, SBB&M, which is tributary to the New River, as indicated on Attachments "A" and "B" incorporated herein and made part of this Board Order.
- 3. The site proposed for remediation is an abandoned fuel farm comprised of eleven 50,000 gallon and twelve 25,000 gallon underground petroleum storage tanks. The tanks were active from 1942 to 1958, when they were either removed or crushed in place during runway expansion activities. Prior to being decommissioned, several tanks leaked petroleum into the groundwater producing a regionally extensive plume that currently encompasses approximately 40 acres.
- Constituents of Concern (COCs) in the petroleum plume include Benzene, 1,2-Dichloroethane (1,2-DCA), and Total Petroleum Hydrocarbons modified for gasoline (TPHg). Contaminant concentrations range up to 18,000 micrograms per liter (ug/L) for Benzene, 1,690 μg/L for 1,2-DCA, and 180,000 ug/L for TPHg.
- 5. Contaminant concentrations in approximately six (6) acres of the plume are sufficiently high to warrant immediate remediation. In these areas, groundwater will be extracted and treated by carbon absorption to reduce COCs to allowable levels.
- 6. The groundwater remediation will take approximately one (1) year to complete. The maximum discharge flow rate of treated groundwater to the dry stormwater ditch will total less than 0.05 million gallons-per-day (MGD).
- 7. The Naval Air Facility at El Centro serves as a tactical training support and fueling facility for fleet air squadrons, and provides additional support to other Department of Defense components.

- 8. The discharger has researched various technologies including bioremediation and in situ chemical oxidation to remediate the petroleum groundwater plume, and concluded that all other options are not economically feasible and/or are not practical to implement.
- 9. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan) was adopted on November 17, 1993 and designates the beneficial uses of ground and surface waters in the Region.
- 10. The designated beneficial uses of waters in the New River are:
 - a. Fresh Water Replenishment of the Salton Sea (FRSH)
 - b. Water Contact Recreation (REC I)1
 - c. Non-Contact Water Recreation (REC II)
 - d. Warm Water Habitat (WARM)
 - e. Wildlife Habitat (WILD)
 - f. Preservation of Rare, Endangered or Threatened Species (RARE)²
- 11. Effluent and receiving water limitations in this Board Order are based on the Federal Clean Water Act, Basin Plan, State Water Resources Control Board's plans and policies, U. S. Environmental Protection Agency guidance, best professional judgment, and best available technology economically achievable.
- 12. Federal regulations for storm water discharge were promulgated by the U. S. Environmental Protection Agency on November 16, 1990 (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities to obtain an NPDES permit if they discharge storm water in association with industrial activity. They also require the facilities to implement Best Conventional Pollutant Technology (BCPT) to reduce or eliminate industrial storm water pollution.
- 13. The State Water Resources Control Board adopted Order No. 91-13-DWQ (General Permit No. CAS000001), as amended by Water Quality Order No. 92-12-DWQ specifying waste discharge requirements for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries to be covered under the Permit.
- 14. The U.S. Environmental Protection Agency adopted the National Toxics Rule (NTR) on February 5, 1993. The NTR requires effluent limitation for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause, or contribute to an in-stream excursion above a narrative or numeric water quality standard.
- 15. On May 18, 2000, the U.S. Environmental Protection Agency published the California Toxics Rule (CTR). The CTR promulgates new criteria for protection of human health and aquatic life. New numeric human health criteria are listed for 57 priority toxic pollutants, and new numeric aquatic life criteria are listed for 23 priority toxic pollutants. The CTR also contains a compliance schedule provision, which authorizes the State to issue schedules of compliance for new or revised NPDES permit limits based on federal criteria.

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¹ Unauthorized use

² Rare, endangered, or threatened wildlife exists in or utilizes some of these waterway(s). If the RARE beneficial use may be affected by a water quality control decision, responsibility for substantiation of the existence of rare, endangered, or threatened species on a case-by-case basis is upon the California Department of Fish and Game on its own initiative and/or at the request of the Regional Board; and such substantiation must be provided with a reasonable time frame as approved by the Regional Board.

- 16. On March 2, 2000, the State Water Resources Control Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (California Toxics Policy). This Policy establishes: (1) implementation provisions for priority pollutant criteria promulgated by the U.S. EPA through the NTR and CTR and for priority pollutant objectives established by the Regional Water Quality Control Boards in their water quality control plans; (2) monitoring requirements for 2, 3, 7, 8- Tetrachlorodibenzo-p-dioxin (TCDD) equivalents, and (3) chronic toxicity control provisions.
- 17. The proposed discharge is consistent with the anti-degradation provisions of 40 CFR 131.12 and State Water Resources Control Board Resolution No. 68-16. The impact on water quality will be insignificant including potential impacts on aquatic life, the beneficial use most likely affected by the discharge.
- 18. The action to adopt an NPDES Permit is exempt from the provisions of the California Environmental Quality Act (CEQA: Public Resources Code Section 21100, et. seq.), pursuant to Section 13389 of the California Water Code.
- 19. The Board has notified the discharger and all known interested agencies and persons of its intent to prescribe an NPDES Permit and waste discharge requirements for said discharge, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
- 20. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act, and regulations and guidelines adopted thereunder, the discharger shall comply with the following:

A. Effluent Limitations

- 1. The 30-day average daily discharge flow shall not exceed 0.05 million gallons-per-day (MGD).
- 2. The effluent shall not contain concentrations of TPHg exceeding 1.0 milligrams-per-liter (mg/L).
- 3. The effluent shall not contain concentrations of Benzene exceeding 1.0 micrograms-per-liter (ug/L).
- 4. The effluent shall not contain concentrations of 1,2-Dichloroethane exceeding 0.5 ug/L.
- 5. The hydrogen ion (pH) of the effluent shall be maintained within the limits of 6.0 to 9.0.
- 6. Should the concentration of any COC exceed the prescribed limits during any sampling event, the discharger shall verbally notify the Regional Board within 48 hours of the constituents involved, provide written notification by certified mail within seven (7) days of such determination, and conduct a discrete retest. If the retest confirms the exceedance of a COC limit, the discharger shall immediately terminate the discharge of treated groundwater to the dry stormwater ditch until further notice from the Executive Officer. In any case, the discharger shall inform the Regional Board of the results of the retest as soon as they are available, and provide written notification by certified mail within seven (7) days of completing the retest.

B. Receiving Water Limitations

 This discharge shall not cause a violation or exceedance of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Regional Board will revise and modify this Permit in accordance with such more stringent standards.

C. Provisions

- This Board Order shall serve as a National Pollutant Discharge Elimination System Permit
 pursuant to Section 402 of the Federal Clean Water Act, as amended, and shall become effective
 at the end of ten (10) days from the date of the hearing at which this Board Order was adopted by
 the Regional Board, provided the Regional Administrator, U.S. Environmental Protection Agency
 has no objections.
- 2. This Board Order expires five (5) years from the date of adoption. The discharger shall file a complete Report of Waste Discharge in accordance with Title 23, California Code of Regulations at least 180 days in advance of such date as an application for issuance of a new Board Order.
- 3. Prior to any changes in the cleanup process which would result in a material change in the quality or quantity of treated groundwater discharged, or any material change in the location of the discharge, the discharger shall report all pertinent information in writing to the Regional Board, and obtain revised requirements before any modifications are implemented.
- 4. The discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
- 5. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
- 6. The discharger shall comply with all conditions of this Board Order. Noncompliance constitutes a violation of the Porter-Cologne Water Quality Control Act or Federal Clean Water Act, and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification of waste discharge requirements; or denial of a permit renewal application.
- 7. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with this Board Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a discharger only when necessary to achieve compliance with the conditions of this Board Order.
- 8. This Board Order does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
- 9. The discharger shall comply with "Standard Provisions for National Pollutant Discharge Elimination System Permit" dated, October 1990 (attached).
- 10. All regulated disposal systems shall be readily accessible for sampling and inspection.
- 11. Adequate measures shall be taken to assure that unauthorized persons are effectively excluded from contact with the treated groundwater disposal facilities.
- 12. The discharger is the responsible party for the waste discharge requirements and the monitoring and reporting program for the facility. The discharger shall comply with all conditions of these waste discharge requirements. Violations may result in enforcement actions including Regional Board Orders or court orders, requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Regional Board.

- 13. The discharger shall retain records of all monitoring information including all calibration and maintenance records, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order. Records shall be maintained for a minimum of three (3) years from the date of the sample, measurement, or report. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board's Executive Officer.
- 14. The discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with the specifications prepared by the Regional Board's Executive Officer. Such specifications are subject to periodic revisions as may be warranted.
- 15. The discharger shall allow the Regional Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the premises regulated by this Board Order, or the place where records must be kept under the conditions of this Board Order;
 - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Board Order:
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
 - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
- 16. The discharger may be required to submit technical reports as directed by the Regional Board's Executive Officer.
- 17. The discharger shall comply with "Monitoring and Reporting Program No. 00-093, and future revisions thereto, as specified by the Regional Board's Executive Officer; and shall be in accordance with the following:
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. All monitoring must be conducted according to test procedures approved under 40 CFR Part 136 or as specified in this Board Order.
 - c. Records of monitoring information shall include:
 - 1. The date(s), exact place(s), and time(s) of sampling or measurement(s);
 - 2. The individual(s) who performed the sampling or measurement(s);
 - 3. The date(s) analyses were performed;
 - 4. The individual(s) who performed the analyses;
 - 5. The analytical technique(s) or method(s) used; and
 - 6. The results of such analyses.
 - d. The results of any analysis of samples taken more frequently than required by Monitoring and Reporting Program No. 00-093 shall be reported to the Regional Board.
- 18. Unless otherwise approved by the Regional Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing"

Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.

- 19. The discharger shall not cause degradation of any beneficial use of surface or groundwater.
- 20. The Federal Clean Water Act provided that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Federal Clean Water Act is subject to a civil or criminal penalty.
- 21. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Regional Board will revise and modify this Board Order in accordance with such more stringent standards.
- 22. This Board Order may be modified, revoked and reissued, or terminated for any cause stated below. The filing of a request by the discharger for a Board Order modification, revocation, and re-issuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Board Order condition. Causes for modification include the promulgation of new regulations, modification of land application plans, or modification in treated groundwater use or disposal practices, or adoption of new regulations by the State Board or Regional Board, including revisions to the Basin Plan.
- 23. The discharger shall report any noncompliance that is likely to endanger human health or the environment, within 24 hours of becoming aware of its occurrence. The incident shall be reported to the Regional Board Office and to the Office of Emergency Services. During non-business hours, the discharger shall leave a message on the Regional Board's voice mail. The Office of Emergency Services is operational 24 hours a day. A written report shall be submitted to this office, within five business days of the discharger becoming aware of the incident. The report shall contain a description of the noncompliance, its causes, the duration, and the actual or anticipated time for achieving compliance. The report shall include complete details of the steps that the discharger has taken or intends to take, in order to prevent recurrence. All intentional or accidental spills of untreated groundwater shall be reported as required by this provision.
- 24. The discharger shall submit data sufficient to determine if a water quality–based effluent limitation is required in the discharge permit as required under the California Toxics Policy. It is the discharger's responsibility to provide all information requested by the Regional Board for use in the analysis. Within 90 days of adoption of this Board Order, the discharger shall provide a time schedule acceptable to the Regional Board for providing the data. The time schedule shall be as short as possible but not to exceed three (3) years from the effective date of the California Toxics Policy. The time schedule shall contain interim requirements and dates for their achievement. There shall not be more than one (1) year between interim dates. The interim requirements require that the discharger shall notify the Regional Board, in writing, no later than 14 days following each interim date, of its compliance or noncompliance with the interim requirements. The permit shall be reopened to establish water quality-based effluent limitations, if necessary.
- 25. In addition, should the discharger request to use a translator for metals and selenium different than the U.S. EPA conversion factor, it shall complete a translator study within two years from the date of the issuance of this permit as stated in the California Toxics Policy. In the event a translator study is not completed within the specified time, the U.S. EPA conversion factor-based effluent limitation as specified in the CTR shall be effective as a default limitation.
- 26. The discharger shall, as required by the Executive Officer, conduct a Pollutant Minimization Program in accordance with the California Toxics Policy when there is evidence that the priority pollutant is present in the effluent above an effluent limitation and a sample result is reported as

detected and not quantified and the effluent limitation is less than the reported minimum level; or a sample result is reported as not detected and the effluent limitation is less than the method detection limit.

- 27. The permit shall be reopened and modified or revoked and reissued as a result of the detection of a reportable priority pollutant identified by special conditions' monitoring data, included in this permit. These special conditions in the permit may be, but are not limited to, fish tissue sampling, whole effluent toxicity tests, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in the permit as a result of the special condition monitoring data.
- 28. By May 18, 2001, the discharger shall begin monitoring its effluent for the presence of 17 (Toxic equivalency factors for 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin equivalents) congeners once during the dry weather and once during the wet weather within a period of three (3) consecutive years.

Duplicate signed copies of these reports shall be submitted to the U. S. Environmental Protection Agency's Regional Administrator, and Regional Board at the following addresses:

Regional Administrator U.S. Environmental Protection Agency Region 9, Attn: W-3 75 Hawthorne Street San Francisco, CA 94105 California Regional Water Quality Control Board Colorado River Basin Region 73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260

I, Philip A. Gruenberg, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the Regional Water Quality Control Board, Colorado River Basin Region, on September 13, 2000.

Original signed by/
Executive Officer